Assessing the intersection of land use and economic development policies in the development of housing in Los Angeles

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By

Nareg Gourdikian

Advisor: Douglas Woodward

Reader: Andy Golubitsky

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Abstract

Cities across the United States are facing seemingly insurmountable affordable housing deficits; leaving many rent-burdened and in part, perpetuating the prevalent issue of homelessness. With over 10% of the country's homeless population living in LA County, it is undeniable that this issue is persistent and pervasive in urban areas like LA, therefore calling for a multifaceted and sustainable solution, largely focused on the development of affordable housing. In this thesis I assess the effectiveness of Transit Oriented Communities and Opportunity Zones as two major place-based policies that have the potential to contribute to meeting the housing need for the city of Los Angeles. More specifically, my investigation aims to determine whether or not the current land use in LA City can accommodate the new development necessary to meet the city's housing need under both place-based policies. This study attempts to 1) calculate the number of homes that could theoretically be built using as of right zoning and Transit Oriented Communities base incentives; 2) understand the socio-economic characteristics of the communities within the areas identified; and 3) recommend a set of policies that would rectify the affordability shortfalls and alleviate the land-use restrictions in the existing planning framework. My assessment found that the existing land use framework can only accommodate 266,852 units of the needed 463,682 and that Opportunity Zone tracts are the most disadvantaged in the region.

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Introduction

Cities across the United States are facing seemingly insurmountable affordable housing deficits; leaving many rent-burdened and in part, perpetuating the prevalent issue of homelessness. In 2018, on a single night, nearly 553,000 individuals were experiencing homelessness across the country—24% (129,972 people) of whom were in California and nearly 50,000 of whom were in Los Angeles (LA) County (United States Department of Housing and Urban Development, 2018). Moreover, in 2019, the Los Angeles Homeless Services Authority (LAHSA) reported approximately 60,000 homeless individuals in LA County (Los Angeles Homeless Services Authority, 2019). With over 10% of the country's homeless population living in LA County, many of whom are considered "chronically homeless"—those who have been continuously homeless for a year or more—it is undeniable that this issue is persistent and pervasive in urban areas like LA, therefore calling for a multifaceted and sustainable solution, largely focused on affordable housing.

A number of cities and states, as well as the federal government, are exploring innovative approaches to address issues of housing affordability through assistance programs, development strategies, tax incentives and land use policies, among others. This thesis will provide an analysis of two such approaches for addressing housing affordability in the context of the City of LA. The policies include: incentives around Transit Oriented Communities (TOC)—mixed-use, high density development built in close proximity to either existing or planned public transit—as well as Opportunity Zones—a new federal, place-based economic development program aimed at encouraging economic development and job creation in distressed communities through capital gains tax abatements to investors who dispose of assets outside of the designated zones. In general, I have chosen to assess these two policies because of their potential to complement one another as well as their likelihood of increasing housing density in urban areas like LA through density and parking incentives, as well as tax incentives.

While TOC and Opportunity Zones are among many potential programs and strategies that can be employed across cities and states to address housing affordability, and admittedly do not exist in a vacuum, in this thesis, I will assess whether the two place-based policies can contribute to meeting the housing need for LA City. More specifically, my investigation aims to determine whether or not the current land use in LA City can accommodate the new development necessary to meet the city's housing need. I define "housing need" based on a calculation from the California Department of Housing and Community Development (later adopted by the Southern California Association of Governors as the official figure), which estimates a needed supply of 463,682 units. It is important to note that this final figure is a significantly higher estimate than the original estimate developed by the Southern California Association of Governors (SCAG), which was met by criticism by California's Governor, Gavin Newson for being a large underestimate.

While my motivation for choosing to assess these two policies will be further elaborated throughout my thesis, in general, I have chosen these two place-based policies foremost because of their relevance to land use and their appeal for redevelopment. They are inexorably linked with housing development and are at the forefront of today's city planning discussions around transportation and housing—particularly in LA. In short, TOC has an affordable housing mandate at its core, which makes it an obvious policy to include in my assessment. Moreover, from an environmental sustainability perspective, I argue that most development ought to be within transit-oriented communities because, as will be further discussed later on, they have the potential to achieve air quality, climate change mitigation and public health co-benefits in addition to the more explicit housing and transportation benefits. On the other hand, while Opportunity Zones do not have an inherent affordable housing component, they are attractive tax incentives which are being discussed presently among stakeholders in the development industry. Contrary to initial expectations when Opportunity Zones were first introduced, to date, the program has only attracted 15% of anticipated capital (Novogradac, 2019). This highlights that they may not be as transformative and heavily pursued as anticipated (to many community advocates' relief, who have staunchly opposed the program), nevertheless, assessing them in the context of housing development is critical.

Based on results from my assessment, with approximately 70% of parcels within Opportunity Zones in Los Angeles County intersecting with TOC, it is important to consider synergies between the initiatives and assess the capacity of land parcels that are governed by these policies to absorb new development. Also, while TOC indeed has housing affordability at the core of its mandate, contrary to Opportunity Zones, findings from my assessment that highlight areas of overlap between the two programs underline opportunities for developers to participate in both policies and take advantage of both sets of incentives. Considering the fact that very few Opportunity Zone funds have deployed capital at this time, evidence of developers participating in both programs is yet to be seen. However, considering the benefits of both programs, these are the areas in which we anticipate the greatest increases in affordable housing development.

This thesis will begin by providing context around affordable housing issues in California and Los Angeles, recent legislation to address affordability and impediments to housing development throughout urban areas across the country. The following section (Chapter 2) will provide background information on the policies of transit oriented development and opportunity zones- both of which will be assessed in the context of LA City in a later section. The third section (Chapter 3) discusses the policy debate around place-based economic development and opportunity zones and the ways in which they impact communities. Chapter 4 outlines the methodology I used to assess land use capacity for absorbing potential new housing development to meet LA City's housing need. Chapter 5 outlines results from my assessment and the final section (Chapter 6) provides a conclusion and major takeaways from my study.

Affordable Housing Crisis in California

Affordable housing, as defined by the United States Department of Housing and Urban Development (HUD), is a housing dwelling that a household can obtain by paying no more than 30 percent of their income (United States Department of Housing and Urban Development, 2019). According to this definition, households are considered cost-burdened if they spend more than 30 percent of their income on housing costs, including utilities, and therefore may face difficulties affording other necessities like food, medical care, transportation and clothing (United States Department of Housing and Urban Development, 2019). Similar to many states across the country, California is experiencing a state-wide housing affordability crisis in which many families either cannot afford or spend too large a proportion of their monthly income on housing costs.

Though estimates vary widely, experts believe the state's affordable housing deficit is approximately 2.5 million homes (Myers et al., 2018). This has indeed been recognized as a state-wide issue by the California government. In 2017, during his gubernatorial campaign, then Lieutenant Governor, Gavin Newsom, placed great importance on issues around housing affordability by pushing for the passage of a $4 billion statewide housing bond to fund affordable housing, increasing tax credits to be invested in affordable housing, as well as linking transportation to affordable housing goals in order to achieve smart growth (Newsom, 2017).

Due to high demand and tight supply, year after year, home prices and rental rates steadily rise throughout the state, further decreasing the margin of affordable housing. In the largest metropolitan areas, the San Francisco Bay Area (which will be referred to herein as the Bay Area) and the Los Angeles Metropolitan Area (which will be referred to herein as LA Metro), housing is increasingly out of reach for average residents. The United States Census Bureau estimates that between 2007 and 2016, California experienced a negative net migration of about 1,000,000 residents, which is in part, attributable to rising housing costs and low-income residents not being able to afford housing (Uhler & Garosi, 2018). For reference, 38% of out-migrants earn less than $50,000 annually (Kneebone & Romem, 2018). Families priced out of the Bay Area are most likely to relocate to the Sacramento area or the central valley, while those leaving LA Metro are more likely to leave the state altogether and find housing in neighboring cities such Las Vegas, Nevada and Phoenix, Arizona (Kneebone & Romem, 2018).

Los Angeles Region Out-Migrants
Breakdown By Destination Within Income Category (percent), 2010-2016

Destination/Origin	Total	Annual Household Income: Up to $50,000	$50,000 to $100,000	$100,000 to $200,000	More than $200,000
Los Angeles out-migrants:					
San Diego metro	8.3	7.7	8.5	9.5	7.9
San Francisco Bay Area	8.9	6.7	7.7	11.6	20.4
Sacramento metro	3.2	3.5	2.7	3.1	3.5
Rest of California	10.7	13.5	9.3	8.4	4.3
Rest of Pacific Division	8.8	8.0	9.5	10.2	7.7
Mountain Division	22.1	24.8	22.7	17.9	13.9
Northeast	6.3	4.7	6.6	7.1	13.4
Midwest	8.8	8.9	9.3	8.4	7.6
South	23.0	22.2	23.8	23.9	21.4

Figure 1: LA Outmigration Statistics, Available at https://ternercenter.berkeley.edu/blog/disparity-departure-los-angeles

The housing affordability crisis has been identified to be the greatest challenge facing California today (in addition to the omnipresent issue of climate change). Although issues around housing affordability have been present for decades, most believe the state has come to a tipping point which has led to a rise in homelessness. In a 2019 survey, 95% of LA residents ranked homelessness as the city’s biggest problem. Unsurprisingly, traffic and affordable housing followed (Oreskes, 2019). As will be further discussed later, these three issues are inextricably linked. According to current market statistics generated by the California Association of Realtors, the median sale price of existing single-family homes in the state of California is $605,680 (2019). In the state’s most populous metropolitan areas, the Bay Area and LA metro, median home prices are $545,000 and $880,000, respectively (California Association of Realtors, 2019). Median home prices in Los Angeles are 9.5 times the city's median household income. By this measure, Los Angeles is the second least affordable city in the country, tracking San Jose's 10.0 income- home value ratio (Joint Center for Housing Studies, 2018).

Political Response

State and local governments have begun to introduce sweeping legislation that addresses core and ancillary issues around housing and affordability burdening Californians. In recent months, several high-profile pieces of legislation that address land use, residential density, property tax reform and rent control have been considered or adopted. This section will elaborate on two of these policies.

In May of 2019, State Senator Scott Weiner introduced Senate Bill 50 (SB50), which, if adopted, would effectively upzone many of the state's largest counties, thereby allowing for increased density in residential and commercial development. The image below (Figure 2) illustrates the major changes proposed, some of which include decreases in parking requirements, increased access to public transit and affordable housing.

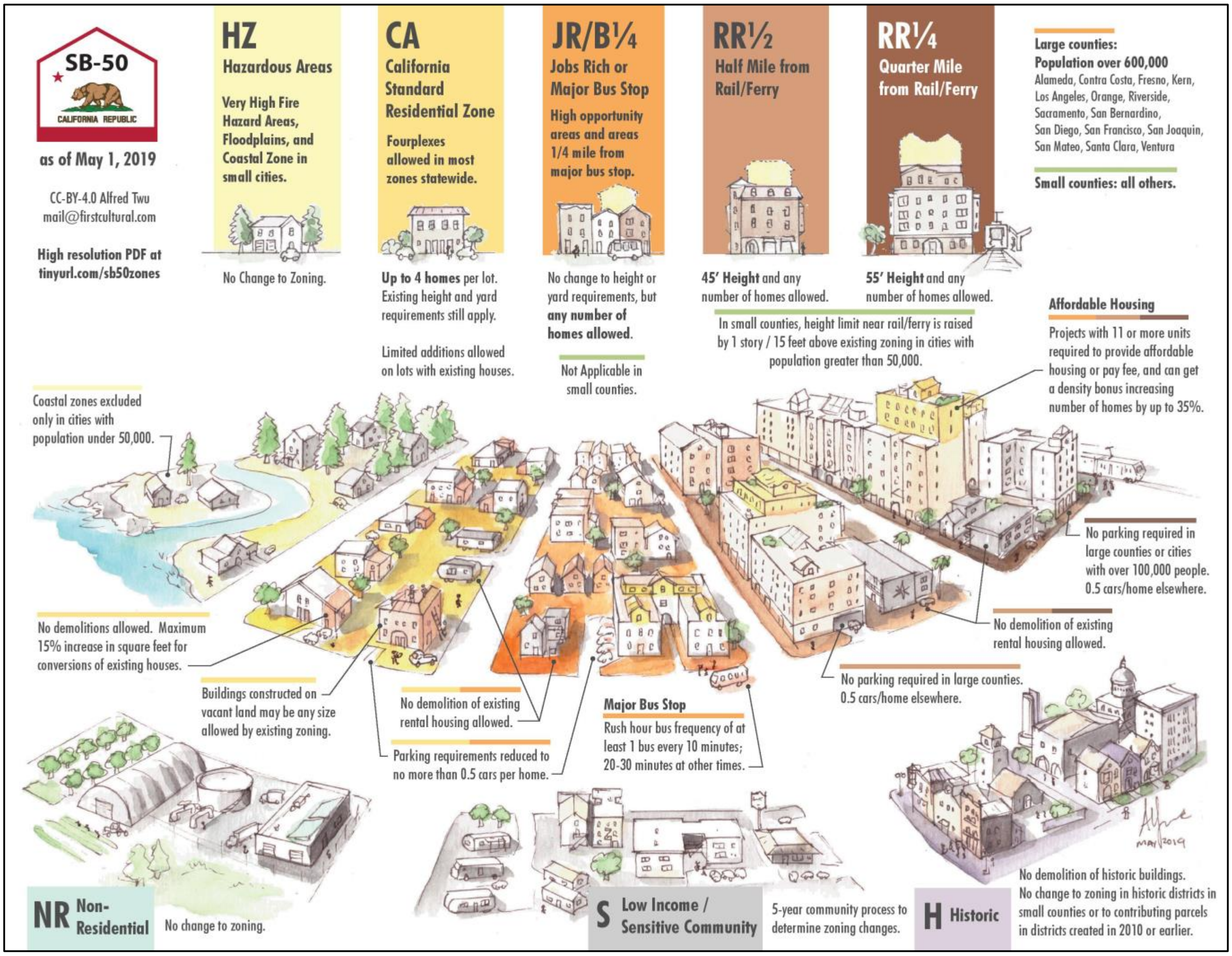

Figure 2: SB-50 Infographic, Available at https://sf.curbed.com/2019/5/10/18563360/senate-bill-50-chart-sb50-explainer-housing-transit

The bill was met with considerable opposition from many Not In My Back Yard (NIMBY) activists and legislators who were resistant to changing the existing characteristics of the communities, as well as from tenants' rights groups, in part due to the mandatory inclusionary housing requirements. As such, the bill has been put on hold in the state senate's Appropriations Committee and will likely be voted on in early 2020 (Skelton, 2019). Although the bill was met with skepticism and fierce opposition by certain groups, it illustrates an overall growing political will on behalf of state and local leaders to make comprehensive changes to the state's restrictive land use regulations.

While SB50's fate is yet to be decided, housing advocates and legislators have proceeded with other statues aimed at increasing the supply of affordable housing. In October of 2019, Assembly Bill 68, introduced by Senator Phil Ting, was signed into law by Governor Newsom. The bill allows a majority of homeowners statewide to build, as of right, two accessory dwelling units on their property, which would increase housing density on a single lot. As such, the bill effectively ended single-family zoning across much of the state.

Considering the state of the housing crisis, Governor Newsom, a vocal proponent of increasing the housing supply, argues that meeting demand must be an all hands-on-deck undertaking, involving many stakeholders. Housing experts and public officials have long argued that municipalities have too much power to disincentivize and block housing development. In efforts to counter this, in 2017, the state mandated that all cities include in their general plans a 'housing element for the preservation, improvement and development of housing' (Dillon, 2019). Two years after that law was adopted, 47 cities across California still lack the required legislation in their general plans. In response, Governor Newsom has instructed California's Attorney General to sue Huntington Beach, the largest city that failed to comply (Dillon, 2019). The bill adopted in 2017 allows the state to fine cities $10,000 per month until they comply. The Governor acknowledges that the blunt approach is unsustainable, but argues that suing cities is a means of last resort. It is yet to be seen whether or not this approach will have future tangible impacts on cities' efforts to stifle development (Dillon, 2019).

Affordable Housing Crisis in the Los Angeles Metropolitan Area

LA Metro, as defined by the federal government's Office of Management and Budget, is comprised of LA County and Orange County (OC), and is home to an estimated 13.3 million people (United States Census Bureau, 2018). The second largest metropolitan area in the United States, LA Metro is an economically, politically, culturally and environmentally diverse mega-region with a GDP in excess of $1 trillion (U.S. Bureau of Economic Analysis, 2019). Although an attractive place of residence for many, in 2018, the state of California experienced its slowest rate of population growth in its history, in large part due to economic strains and lack of housing, both of which have driven outmigration (Panzar and Parvini, 2019).

Of the residents who cannot afford to purchase a home or do not leave the state, many are compelled to rent. LA has the fourth-highest share of renters across the country, trailing only Miami, New York and Boston. At 3.3%, LA is the seventh tightest residential markets in the country (CBRE, 2019). In the City of LA, rental rates are the inverse of the national average; approximately 64% of households in LA rent, compared to national average of 36% (Furman Center, 2017). While renting is a relatively more affordable option for many compared with homeownership, renters in LA are not free of affordability challenges. A new report by the Federal Home Loan Mortgage Corporation (FreddieMac) concludes that LA Metro ranks as the third most rent-burdened metropolitan region in the United States—behind Miami, Florida and San Diego, California. Moreover, they report that in general, the most rent-burdened places to live across the country are in Southern California (Federal Home Loan Mortgage Corporation, 2019).

More than 56% of households within Los Angeles and Orange counties fit this description and experience rent burden (Center for Neighborhood Knowledge, 2018). For comparison, the national average of rent burdened households is 48.3% (Furman Center, 2017). Worse still, 28.8% of households in Los Angeles are severely rent burdened, spending more than 50% of income on housing (California Housing Partnership, 2017). Increased economic pressure on LA residents, median rent in LA County has increased by a staggering 32% since 2000, while median renter household income has decreased by 3% (California Housing Partnership, 2017). More than ever, renters today are feeling the crushing weight of living in Los Angeles. As such, according to a recent report from the rental database Apartment List, more than a third of all renters in the city are currently looking for rental apartments outside of the metropolitan area with hopes of escaping the rent burden (Salviati, 2019).

Homelessness

Apart from record rent burdened individuals, the housing affordability crisis has also exacerbated homelessness throughout Southern California. A federally mandated biennial *Point in Time* homeless census that took place in April 2019 found that both Los Angeles and Orange counties have experienced double digit increases in homelessness since 2017: LA County saw a 12% spike while Orange County saw an increase of 42% (Los Angeles Homeless Services Authority, 2019). As of earlier this year, Los Angeles and Orange counties have homeless populations of 58,936 and 6,860, respectively (Los Angeles Homeless Services Authority, 2019).

It is a misconception that the majority of people experiencing homelessness are from distant communities. A majority of the homeless population in LA Metro are in fact longtime residents: 65% have lived in LA for over 20 years and 75% previously lived in LA before they became homeless (Los Angeles Homeless Services Authority, 2018). Elise Buik, the Chief Executive of the United Way of Greater Los Angeles, a homeless advocacy group, recently told the New York Times that “our housing crisis is our homeless crisis” (Cowan, 2019), further highlighting the inexorable link between homelessness and unaffordable housing. People experiencing homelessness are often secondary or tertiary victims of displacement pushed to the streets as displacement ripples through the housing market. In short, as the homelessness crisis is in part a product of the affordability crisis, solutions around increasing affordable housing will inevitably, in part, address homelessness. Nevertheless, here it is important to note that complementary rehabilitation and assistance programs for veterans and persons with disabilities, as well as shelters, among other programs, are necessary approaches for comprehensively addressing issues around homelessness.

In light of the escalating homelessness crisis, LA City and LA County adopted a pair of high-profile relief programs that aim to assist people experiencing homelessness. Measure H, the County’s aid program which was adopted in 2017, is a quarter-cent sales tax increase that is expected to raise $355 million dollars per year to be invested in a variety of programs categorized into six elements: prevent homelessness, subsidize housing, increase income, improve case management and related services, increase system coordination and increase affordable/ homeless housing (Los Angeles County Homeless Initiative, 2017). The County intends to spend this tax revenue on 47 strategies (Appendix I) that will mitigate some of the core issues around homelessness. In the two years since its inception, the measure has reached the milestones illustrated below in Figure 3. Most notably, as mentioned in the figure, 36% of progress has been made toward the goal with tens of thousands of individuals having been placed in interim housing and permanent housing, as well as over twenty thousand individuals having been prevented from becoming homeless and have experienced an increase in income.

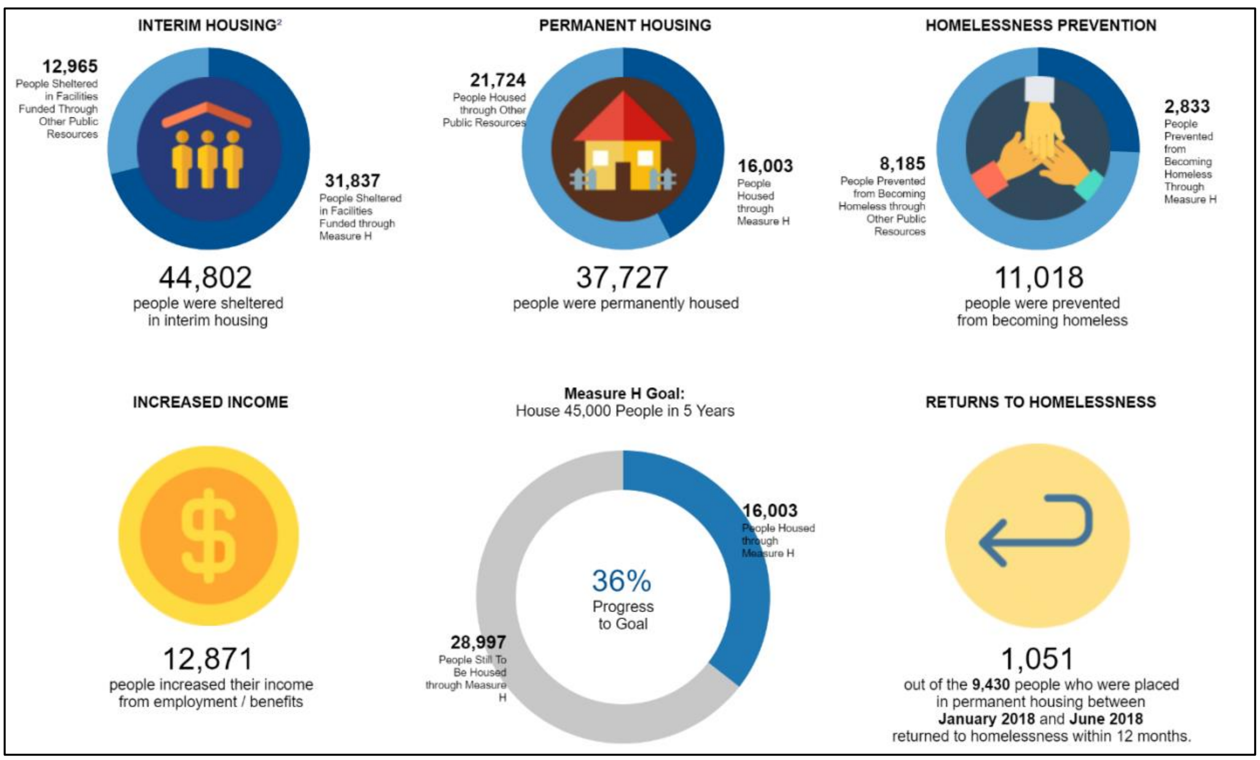

Figure 3: Measure H progress report, Available at https://homeless.lacounty.gov/impact-dashboard/

Passed in 2016, the City's complementary initiative, Proposition HHH, is a $1.2 billion bond measure funded by a property tax increase. The money was intended to help LA City purchase property, sign long term land leases with developers and finance up-front construction costs to develop the initial goal of 10,000 supportive housing units, all of which would provide shelters for tens of thousands of homeless individuals (Los Angeles Housing & Community Investment Department, 2016).

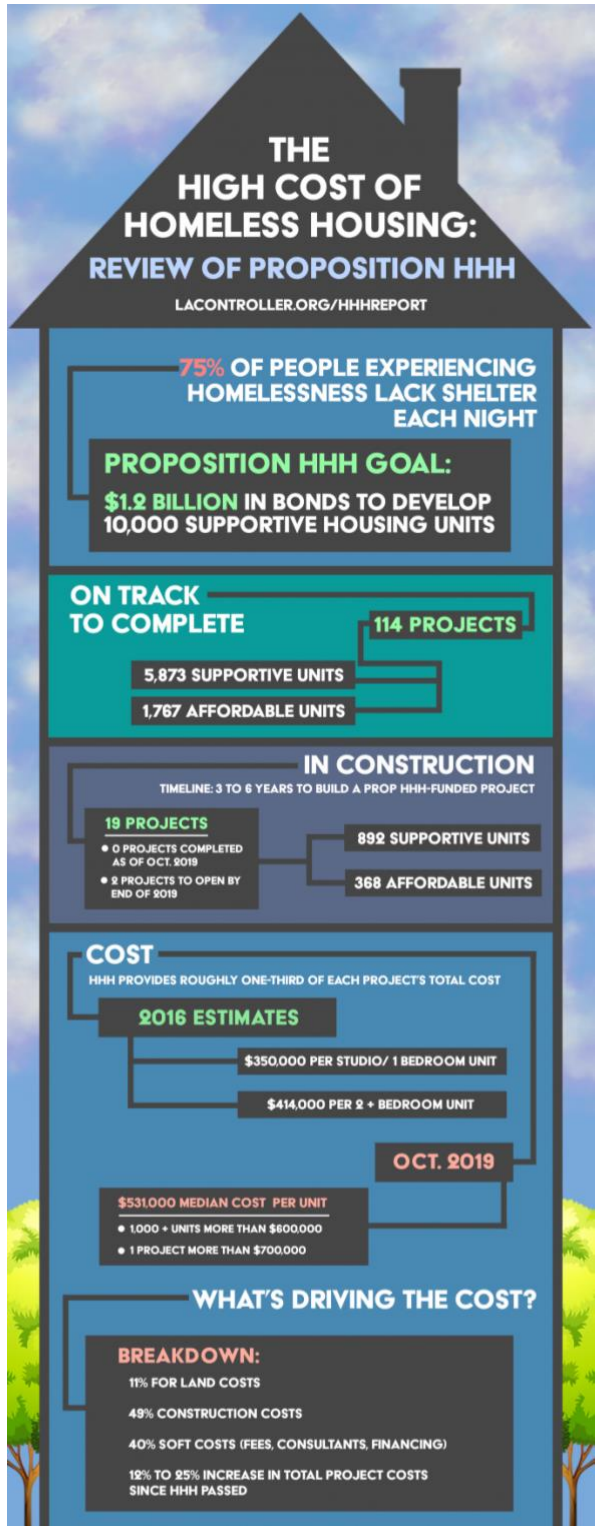

Figure 4: HHH progress report 2019,

Available at https://lacontroller.org/audits-and-reports/high-cost-of-homeless-housing-hhh/

Initially, during the time of its passage in 2016, LA City expected the funding to produce 10,000 units of affordable housing in ten years. Three years later, in October of 2019, the last block of funding, $358.1 million, was committed to 38 projects across LA county, bringing the final tally of funded units to 8,625 (Chandler, 2019). The unit shortfall and delivery delays prompted an internal review from the City Controller. As cited in the program's October 2019 report, Controller Ron Galperin found that only 1,260 units were under construction and no developments had opened. The report cited ballooning construction costs and red-tape as critical impediments to the

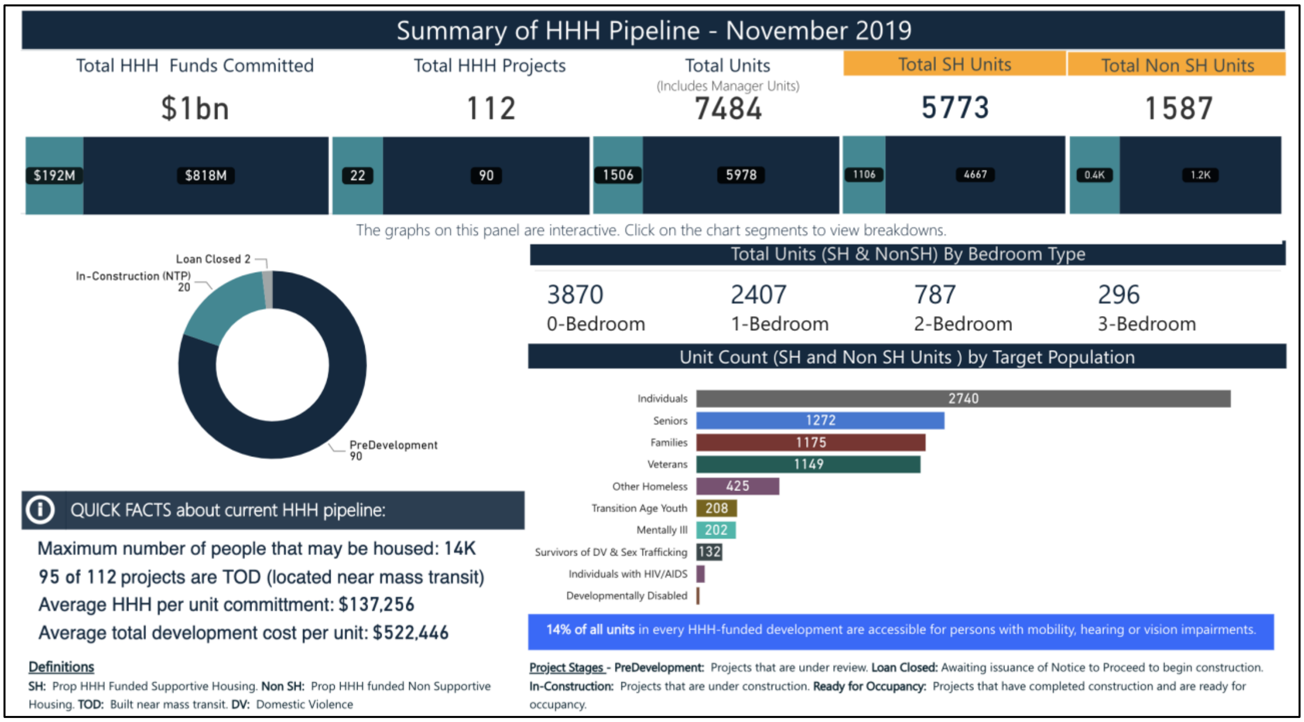

Figure 5: Prop. HHH, progress report, Available at https://hcidla.lacity.org/hhh-progress

housing roll-out (Galperin, 2019). The median cost per unit was found to be $531,000, significantly greater than the originally projected $350,000 cost for studios and one-bedroom units in 2016.

Housing Need

The Southern California Association of Governments (SCAG), the Metropolitan Planning Organization that advises 191 municipalities across six counties, periodically generates a state mandated Regional Housing Needs Assessment (RHNA). The findings of the RHNA, which is generated every eight years, are meant to inform member jurisdictions' general plan Housing Elements, a report that outlines current and future housing needs. Member municipalities use the RHNA forecast to inform land use planning and resource allocation. The fifth RHNA, which was adopted in 2012, is set to expire in 2021 and the methodology for the sixth cycle was adopted in November 2019. The methodology accounts for in-place demographic and socio-economic statistics and incorporates findings from other SCAG assessments such as population and job growth forecasts, transit and job accessibility rates and other pieces of data to generate an approximate number of homes needed to fulfill current and future housing demand (SCAG, 2019). The RHNA allocation methodology also assigns the total number of homes into income categories. For cities with a high concentration of low and very low-income households, a social equity adjustment is factored in to overcome systemic segregation.

SCAG's 6th cycle RHNA estimates the region's housing need to be 1,341,827 units (to cover 191 municipalities across six counties). Twenty-six percent of these units are needed by very-low and extremely-low households, defined as those households that earn less than 50% of county median income. Surprisingly, the above-moderate income band, defined as those earning more than 120% of median county income, had the highest percentage of housing need, at 41% (California Department of Housing and Community Development, 2019).

Southern California Housing Need

Income Category	Percent	Housing Units Needed
Very- Low	26.1%	350,998
Low	15.3%	206,338
Moderate	16.7%	225,152
Above-Moderate	41.8%	562,252
Total	100%	1,344,740

City of Los Angeles Allocation

Income Category	Percent	Housing Units Needed
Very- Low	25.4%	117,823
Low	15.3%	69,848
Moderate	16.5%	76,285
Above-Moderate	43.1%	199,726
Total	100%	463,682

Impediments to Affordable Housing Development

While the pent-up demand for new homes is appreciable, in general, building new housing in high demand markets is a complex and costly endeavor and is largely bound by the existing regulatory environment (Joint Center for Housing Studies, 2018). Similarly, development of affordable housing is a challenging undertaking and faces impediments from general regulatory barriers like environmental protection regulations, limits on developable land supply, as well as onerous permitting and approval processes, among other hindrances. These regulatory impediments can impact a state's ability to fulfill its affordable housing needs by constraining the supply of affordable housing and causing inflation in rent and housing prices in many markets (United States Department of Housing and Urban Development, 2005).

For example, in regard to the abovementioned regulatory impediments around zoning and land use, a 2019 study found that the state's current zoning laws only allow the development of an additional 2.8 million homes, far fewer than Governor Newsom's new housing development goal of 3.5 million (Monkkonen & Friedman, 2019). As the state's current zoning laws permit the development of almost a million fewer homes than necessary according to the Governor's housing plan, similarly, regulatory barriers also continue to impede the development of affordable housing.

In addition to general regulatory barriers, NIMBY opposition to affordable housing has historically been a pervasive practice that has leveraged wealth and power to heavily influence housing and planning policies and has excluded marginalized and vulnerable communities from participating in decision-making (Scally & Tighe, 2014). For example, NIMBY activists may pressure policymakers to support the implementation of policies like exclusionary zoning to intentionally limit affordable housing development, or they may carry out delaying tactics around project approval in order to deliberately present obstacles for rental housing, and other kinds of affordable housing (United States Department of Housing and Urban Development, 2005).

While the affordable housing development landscape may seem bleak, shifting attitudes and local political support for affordable housing have the power to bring about change. For instance, a 2019 survey conducted by the Public Policy Institute of California found that 62% of respondents are in favor of requiring multi-family development in job and transit rich neighborhoods that are currently zoned for single family residential use (Baldassare, 2019). Shifting public opinion in support of increasing density can counter the existing NIMBY opposition.

Policy Evaluation

Smart Growth

'Smart growth' is a transportation and planning strategy that encourages the preservation of natural landscapes and the densification of existing communities to avoid sprawl. First championed by Peter Calthorpe, smart growth advocates argue that high density, mixed-use development leads to more efficient allocation of public resources, a decrease in greenhouse gas emissions, tighter social bonds and a more economically and socially equitable society (Lewis-Workman, 1997; Ewing et al., 2007). In contrast, sprawl, which is the prevailing suburban development typology across LA metro, perpetuates unrestricted growth across large expanses of land. It is argued that sprawl, which is environmentally taxing and does not support dense development, can exacerbate the affordable housing shortage, has the potential to lead to social isolation due to lifestyle and commuting patterns and can diminish a society's social and political capital (Freilich & Peshoff, 1997).

Contrary to transportation planning strategies like increased highway infrastructure that meet the demands of sprawling development, an important strategy for achieving smart growth is transit-oriented development (TOD), mixed-use, high density development built in close proximity to either existing or planned public transit nodes, including metro stations and high-frequency bus routes (Calthorpe, 1993). When implemented by local and regional planning agencies, TOD has the potential to improve the environmental quality, economic vitality and public health of a region. These benefits will be further elaborated in the following section.

Transit Oriented Development: Benefits

TOD is an integrated policy approach that seeks to align transit and land use goals in a region or city by creating denser, mixed-use, livable communities. TOD can provide communities with “an alternative to the predominant pattern of low-density sprawl that results in dependency on automobile travel” (Parker et al., 2002)—this is particularly true for the case of many California communities, including LA. Moreover, TOD is an approach for providing affordable housing while simultaneously decreasing vehicle miles traveled, reducing cost of living, protecting peripheral open spaces as well as increasing physical activity (Calthorpe, 1993).

Studies have found that living in a transit-oriented community can achieve reductions in greenhouse gas emissions in the transportation sector as fewer individuals would drive cars for their daily commutes and other activities (Bostic & Boarnet, 2015) (Center for Transit-Oriented Development, Living Cities, Boston College’s Institute for Responsible Investment, 2009). Additionally, emissions reductions associated with reduced Vehicular Miles Travelled (VMT) would translate into improved air quality, and increasing opportunities for walking would increase physical activity and reduce risks of health problems related to obesity—both of which would have positive impacts on health. These co-benefits around climate change mitigation, air quality improvement and public health are important to consider when developing TOD policies.

Affordable housing is commonly incorporated into TODs as the two can be complementary to one another for the following reasons: 1) including affordable housing in TOD likely helps to prevent the gentrification and displacement that generally follows TOD; 2) requiring or incentivizing the inclusion of affordable residential units in TOD increases the much needed supply of affordable units; 3) TOD has the potential to provide low income communities with socio-economic opportunities including reduced transportation costs and easier access to jobs (Boarnet et al. 2017)

Regional Transit Oriented Development: The Case of LA

On a regional level, there are very few pieces of legislation are aimed at increasing residential density and curbing automobile use— this limited legislation has been introduced by SCAG and the Los Angeles County Metropolitan Transportation Authority. Nevertheless, comprehensive TOD policy has been implemented on a municipal level in the City of LA. This is will be further discussed in the following section.

SCAG does not have the authority to regulate land use but instead conducts the RHNA which consequently influences local land use. SCAG's assessment determines housing need on a regional scale and subsequently allocates a proportion of the regions need to each municipality based on current and projected housing demand. While SCAG does not have authority to regulate a city's land-use capacity, recently adopted legislation, SB828 and AB1771, grant California's Department of Housing and Community Development (HCD) the authority to reject problematic housing elements and require amendments in the event that the municipality's present land use cannot accommodate the prescribed RHNA allocation (Elmendorf et al., 2019). The agency's new powers are likely to be challenged in court.

Historically, NIMBY opposition has been vocal in encouraging SCAG to under-represent the region's affordable housing need, therefore requiring less allocations (Monkkonen & Manville, 2019). Under pressure from NIMBY constituents and politicians, in June of 2019, SCAG released a preliminary methodology for the 6th cycle RHNA which estimated the region's housing need to be 430,000 homes. The draft assessment allocated a disproportionate amount of the region's homes into transit and job poor communities in Imperial and Riverside Counties, a move that critics say will encourage more residential sprawl (Monkkonen, 2019). Following resistance by affordable housing advocates, environmental leaders and members of SCAG's methodology subcommittee, the Governor's office intervened and nullified the agency's original determination. Ultimately, Governor Newsom mandated SCAG to adopt a regional needs assessment carried out independently by California's HCD. This final figure was more than three times the amount originally projected by SCAG (California Department of Housing and Community Development, 2019).

Similarly, the Los Angeles County Metropolitan Transportation Authority has no regulatory authority. Their involvement in local land-use conversations is limited to construction project reviews and planning toolkits to aid localities in adopting city-specific TOD legislation. In 2018, the agency adopted a transit-oriented communities (TOC) policy which focuses on streamlining their efforts to partner with the 88 cities and unincorporated areas they serve (LA County Metropolitan Transportation Authority, 2019). The policy encourages the agency to consult cities on issues concerning: first/last mile mobility strategies, system wide design and joint development of transit. The agency also offers cities a TOD planning grant to spur transit focused planning throughout Southern California (LA County Metropolitan Transportation Authority, 2019).

Over the last 26 years, LA County Metropolitan Transportation Authority has invested heavily in expanding its network. It is currently made up of two heavy rail lines, four light rail lines, two BRT routes and 170 bus routes. Their steady expansion has been funded by federal transportation grants and local tax increases, namely Measure M, the 2016 sales tax measure that is set to generate $120 billion for the agency over the next 40 years. Due to the region's infamous traffic congestion, there is persistent support for continued expansion of public transit. Seven projects are currently under construction and seven additional projects have published draft environmental impact reports. In 2017, LA County Metropolitan Transportation Authority's board unveiled the 28 by 2028 initiative, an aggressive set of plans to expedite the network's expansion in time for the 2028 Los Angeles Summer Olympics (LA County Metropolitan Transportation Authority, 2017). The dashed lines in the image below (Figure 6) illustrate the routes and improvements being considered by officials. These projects are important contributions made by the LA County Metropolitan Transportation Authority to foster TOC on a local level.

Figure 6: 28 by 2028 projects Available at https://i.redd.it/3y9bozgp4yz21.png

Transit Accessible Affordable Housing: City of Los Angeles

Due to its sheer scale and progressive leadership, much of the TOD initiatives around transit and affordable housing that are poised to transform the region have been adopted by the city of LA. In 2016, city voters approved ballot Measure JJJ, a comprehensive package of affordable housing regulations and incentives. The Measure includes legislation that requires developers to pay prevailing wage labor and to set aside affordable units for any project that requires a change in zoning or general plan amendment. This provision has essentially eliminated zone change requests in the city.

Experts believe the passage of the measure has actually slowed down housing development in LA. An 11.3% drop in applications was observed following the passing of the measure (Vallianatos, 2019).

Figure 7: A TOC approved housing development in the Pico- Robertson neighborhood of LA, Available at https://urbanize.la/post/city-planning-commission-rejects-appeal-pico-robertson-toc-project

However, the dip in production has been offset by JJJ's TOC provision, which amended the city's municipal code and now allows parcels within a half mile radius of a major transit stops to build at greater density, while also decreasing the amount of parking required on-site. The tier-based system grants each parcel a set of incentives depending on proximity to a transit stop (Figure 8). Property owners may request additional incentives such as yard setback reductions, height exemptions, and increases in lot coverage ratios in exchange for additional affordable units (Appendix II). The program's base incentives include an increase in residential density and a decrease in automobile parking (Figure 9). The average permitting timetable for a TOC project is 3 months, 45% quicker than the average seven-month timeline for Density Bonus permits (LA City Planning, 2018). The matrices below outline buffer distances and baseline density and parking incentives.

Type of Major Transit Stop	**Tier 1 (Low)**	**Tier 2 (Medium)**	**Tier 3 (High)**	**Tier 4 (Regional)**
	Distance to Major Transit Stop			
Two Regular Buses (intersection of 2 non Rapid Bus* lines, each w/ at least 15 min. average peak headways)	750 - 2640 ft.	< 750 ft.	-	-
Regular plus Rapid Bus* (intersection of a Regular Bus and Rapid Bus line)	1500 – 2640 ft.	750 – <1500 ft.	< 750 ft.	-
Two Rapid Buses* (intersection of two Rapid Bus lines)	-	1500-2640 ft.	< 1500 ft.	-
Metrolink Rail Stations	1500 – 2640 ft.	750 – <1500 ft.	< 750 ft.	-
Metro Rail Stations	-	-	≤ 2640 ft.	< 750 ft. from intersection with another rail line or a Rapid Bus*

Figure 8: TOC Tier buffers, Available at https://planning.lacity.org/ordinances/docs/toc/TOCGuidelines.pdf

	Increase in Number of Dwelling Units	Floor Area Ratio (FAR)	Residential Minimum Parking Requirements	Non-Residential Parking
Tier 1	50%	Percentage increase of up to 40%, or an FAR increase resulting in at least 2.75:1 FAR in commercial zones, whichever is greater	.5 per bedroom	10% reduction
Tier 2	60%	Percentage increase of up to 45%, or an FAR increase resulting in at least 3.25:1 FAR in commercial zones, whichever is greater	1 per unit	20% reduction
Tier 3	70%	Percentage increase of up to 50%, or an FAR increase resulting in at least 3.75:1 FAR in commercial zones, whichever is greater	.5 per unit	30% reduction
Tier 4	80%	Percentage increase of up to 55%, or an FAR increase resulting in at least 4.25:1 FAR in commercial zones, whichever is greater	0 per unit	40% reduction

Figure 9: TOC Baseline Incentives, Available at https://planning.lacity.org/ordinances/docs/toc/TOCGuidelines.pdf

There are a few exceptions to the incentive:

1. In RD zones, Specific Plans areas or overlay districts that regulate residential FAR, bonus FAR shall not exceed 45%.
2. In any zone where FAR is below 1.25:1, maximum FAR shall not exceed 2.75:1.
3. In the Greater Downtown Housing Incentive Area, maximum FAR bonus is limited to 40%.

In exchange for the bonuses, residential developers are required to supply on-site income restricted affordable units:

a) Tier 1 - 8% of the total number of dwelling units shall be affordable to Extremely Low Income (ELI) income households, or 11% of the total number of dwelling units shall be affordable to Very Low (VL) income households, or 20% of the total number of dwelling units shall be affordable to Lower Income households.
b) Tier 2 - 9%, ELI, or 12% VL, or 21% Lower.
c) Tier 3 – 10% ELI, or 14% VL or 23% Lower.
d) Tier 4 – 11% ELI, or 15% VL or 25% Lower.

The program adopted the qualifying income limits from Section 8 of the United States Housing Act of 1937. Extremely low-income households are defined as those whose annual income does not exceed 30% of area median income (AMI). Very-low income households earn 50% of AMI. Lower income households earn no more than 80% of AMI. According to the California Department of Housing and Community, the 2019 median income for a family of four in LA County was $73,100 (HCD, 2019). The chart below illustrates the income limit categories by number of people in a household.

	Income Category	1	2	3	4	5	6	7	8
Los Angeles County	Extremely Low	$ 21,950	$ 25,050	$ 28,200	$ 31,300	$ 33,850	$ 36,350	$ 39,010	$ 43,430
	Very Low Income	$ 36,550	$ 41,800	$ 47,000	$ 52,200	$ 56,400	$ 60,600	$ 64,750	$ 68,950
$ 73,100	Low Income	$ 58,450	$ 66,800	$ 75,150	$ 83,500	$ 90,200	$ 96,900	$ 103,550	$ 110,250
	Median Income	$ 51,150	$ 58,500	$ 65,800	$ 73,100	$ 78,950	$ 84,800	$ 90,650	$ 96,500
	Moderate Income	$ 61,400	$ 70,150	$ 78,950	$ 87,700	$ 94,700	$ 101,750	$ 108,750	$ 115,750

Figure 10: CA HCD income bands 2019, Available at https://www.hcd.ca.gov/grants-funding/income-limits/state-and-federal-income-limits/docs/Income-Limits-2019.pdf

The TOC program has been a runaway success. As of September 2019, 10,496 units of housing have been permitted through the program and 2,766, or 26% of all units, are income restricted (California Department of Housing and Community Development, 2019). It is the most successful housing entitlement program in the city—through Q2 2019, the TOC program was responsible for 47% of all housing entitlement permits.

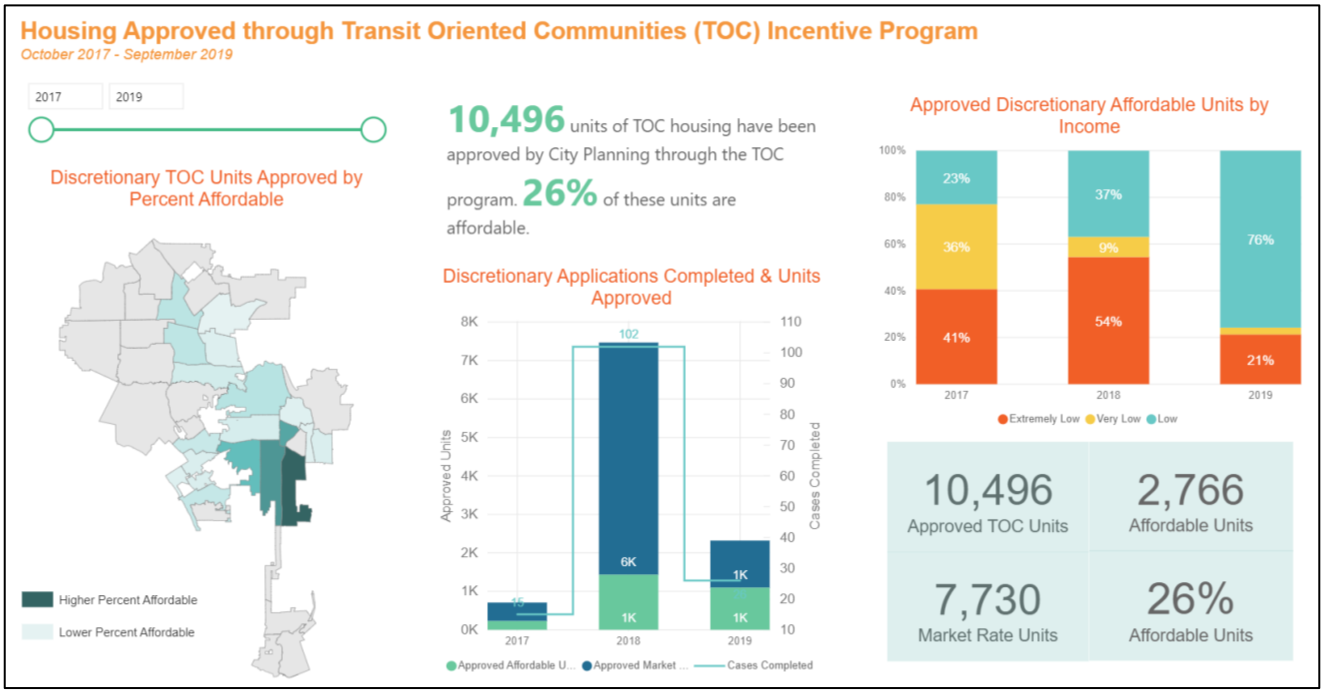

Figure 11: TOC housing units approved through Sept. 2019, Available at https://planning.lacity.org/resources/housing-reports

Evidenced by the decline in permit applications and the success of the TOC provisions, housing experts believe City residents would have been better off if the TOC guidelines were passed as a stand-alone program (Sharp, 2019).

Opportunity Zones

The Opportunity Zones Program is a new federal, place-based economic development program that passed in 2017 as part of the Trump Administration's Tax Cuts and Jobs Act. The program, which received bipartisan support, aims to spur economic development and job creation in distressed communities by offering capital gains tax abatements to interested investors who dispose of assets outside an Opportunity Zone. Under the new law, capital gains that are realized from the dispossession of an asset must subsequently be invested into a Qualified Opportunity Fund to benefit from the preferential tax treatment (Internal Revenue Service, 2018). The program offers investors three simultaneous tax benefits (Tax Policy Center, 2018):

1. The temporary deferral of taxes on previously earned capital gains, to the extent the gains are reinvested into a QOF.
    a. Investors can place existing assets with accumulated capital gains into Opportunity Funds. Those existing capital gains are not taxed until the end of 2026 or when the asset is sold.
2. Basis step-up of previously earned capital gains invested.
    a. For capital gains invested into a QOF for at least five years, an investor's basis on the original investment increases by 10%. If invested for at least seven years, investor's basis on the original investment increase by 15%
3. Permanent exclusion of taxable income on new gains.
    a. For investments held for at least 10 years, investors pay no taxes on any capital gains produced through their investment in a Qualifying Opportunity Funds.

Qualified Opportunity Funds may invest in industrial and commercial real estate, infrastructure, housing and start-up or existing businesses (Theodos, 2018). Funds that invest in real estate must make 'substantial improvements' to qualify for Opportunity Zone financing.

The law incorporated 'low-income' criteria first introduced in the New Market Tax Credit program, a federal economic development tool adopted in 2000. State governors were asked to nominate 25% of low-income census tracts where:

1) the poverty rate for such tract is at least 20% or;
2) in the case of a tract:
    a) not located within a metropolitan area, the median family income for such tract does not exceed 80 percent of statewide median family income or;
    b) located within a metropolitan area, the median family income for such tract does not exceed 80 percent of the greater statewide median family income or the metropolitan area median family income (IRS, 2000).

In addition, census tracts that are contiguous to ‘low-income’ tracts were eligible to be nominated, so long as the tracts median family income does not exceed 125% of the adjacent tracts’ median income; the number of contiguous tracts must not exceed 5% of all tracts.

A total of 42,176 tracts were eligible for designation. Following a brief public comment period, 8,762 tracts were designated in July 2018—2.6% of the selected tracts are contiguous tracts.

Eight hundred seventy-nine census tracts within the state of California have been designated as Opportunity Zones; 274 of those are in LA County and 193 are in the city of Los Angeles.

Literature Review

Place-based economic development

Place-based economic development policies, in contrast to place-neutral policies, explicitly target specific geographic areas (Busso et al., 2013). This approach highlights the distinctive features of certain places, builds upon existing local assets, and leverages them to draw in new investment and improve existing businesses (Complete Communities Toolbox, 2013). Economic theories around spillover effects of human capital and agglomeration economies suggest that place-based policies have the potential to enhance welfare. Nevertheless, urban economists argue that as these externalities are nonlinear, place-based policies are equally as likely to reduce as they are to increase welfare (Glaeser & Gottlieb, 2008).

Place-based policies in the United States have a varied record, with mixed successes and failures. As such, there has often been skepticism around the efficiency and efficacy of targeting places rather than people (Nunn et al., 2018). However, evidence of regional economic gaps and disparities in living standards in many parts of the country have led policymakers to consider whether place-based policies can be effective in raising standards of living and driving economic growth in disadvantaged communities (Nunn et al., 2018). It is argued that place-based economic development policies are potentially redistributive by nature, as they are deployed in underperforming areas (Reynolds and Rohlin, 2015). Nevertheless, this equity-based motivation for pursuing place-based policies is complex, as welfare effects can unfold differently than intended. For instance, the mobility of capital and people can potentially complicate the positive impacts of, and in some cases undo the benefits from, redistributive initiatives (Neumark & Simpson, 2015).

One place-based policy that has garnered the most discussion among academics is enterprise zones (Neumark & Simpson, 2015; Nunn et al., 2018). For example, the US Federal Empowerment Zone Program (1993) is a series of geographically targeted block grants and tax incentives intended to encourage businesses and investors to relocate to or invest capital into low-income communities (Busso et al., 2013). The program allowed local governments to submit proposals for designating zones—including Renewal Communities, Empowerment Zones, and Enterprise Zones—comprised of low-income census tracts with high unemployment rates.

Although the policy is considered to be largely a place-based policy, it had several people-based elements, including educational attainment and job training components. Since its enactment, the program has contributed to boosting wages as well as decreasing poverty and unemployment levels in targeted communities—in both rural and urban low-income populations (Oakley, 2006; Hanson, 2009). Nevertheless, an assessment found that the majority of the benefits were concentrated in areas within the zone that were already relatively better off before the policy was adopted. In fact, evidence suggests that the program made the zones more attractive to higher-income households, which in turn displaced the in-place community (Reynolds & Rohlin, 2015). While this policy achieved overall benefits, these benefits were not experienced equitably and did not accrue to the most disadvantaged.

The New Market Tax Credit (NMTC) program (2000), another place-based economic development policy, has attracted an estimated $57.5 billion dollars in private investment into lower-income communities (Hula & Jordan, 2018). Projects funded through the program were proportionally split between urban and rural communities and 69% of participants surveyed said they would not have made the investment in a low-income community were it not for the incentive (Abravanel et al., 2013). Nevertheless, the measurable impacts of the program remain unclear and vary depending on the metrics used and industries investigated (Harger & Ross, 2016).

In general, place-based economic policies are popular among policymakers because targeting a specific geographic area often resonates with constituents. “Where people live is a crucial determinant of their economic opportunities” (Nunn et al., 2018)—therefore, place-based investments in public goods and institutions can improve individuals’ standards of living. Nevertheless, urban economists are often skeptical of this approach as people and employment centers are mobile, and place-based programs often manifest in benefitting the real estate owners and businesses rather than individuals living in the defined area. As such, economists generally favor progressive tax systems and means-tested transfer programs which are more rigid, people-based programs that focus on assisting poor households (Kline & Moretti, 2014).

Opportunity Zones

Considering the novelty of the federal Opportunity Zone program, there is little academic literature assessing the outcomes, benefits and drawbacks of the policy. Nevertheless, as a place-based policy, Opportunity Zones can be considered within the context of the above discussion about place-based economic development in general. Considering the limited literature on Opportunity Zones, this section will provide a discussion on the outcomes and beneficiaries of the new place-based policy based on the limited number of reports available.

The stated goal of the Opportunity Zone incentive is to attract private investors to ‘deposit’ their capital gains into distressed communities, with the hope that the capital will be used to develop housing, start businesses and improve low-income neighborhoods. Moreover, the capital is meant to spur development and attract additional capital investments to surrounding neighborhoods—creating a spillover effect. This intended spillover effect draws assumptions from the above discussion on theories around human capital spillover and agglomeration economies having the potential to enhance welfare in disadvantaged communities. Nevertheless, Opportunity Zones do not explicitly (as per their mandate) intend to improve the socioeconomic well-being of residents living in the designated area nor do they ensure protections for local communities (Jacoby, 2019).

As made evident by a recent New York Times report, the program has spurred the development of high-end apartment buildings, hotels and student housing, among other expensive projects (Drucker, 2019). Experts believe that $57 billion has been raised in more than 285 opportunity funds—but there is little to no oversight about who has invested in these funds and what types of investments they are seeking to make (Theodos, 2018). As such, economists and analysts fear that that these tax benefits will continue to make their way into the wrong hands and pay for the wrong things—like Amazon receiving tax benefits to build their headquarters in DC (Capps, 2018). For this reason, experts maintain that zone selection is critical so that places that really need investment receive it, and benefits accrue to low income communities (Capps, 2018). There is also evidence that suggests that some census tracts were erroneously designated as Opportunity Zones. For instance, in New York and Kentucky, in communities like Sunset Park, Brooklyn and downtown Louisville, qualifying low-income neighborhoods that had been experiencing private investment in the year proceeding the Opportunity Zone designation were designated despite their upward trends (Weaver, 2018).

While the above discussion represents a misalignment of policy goals and outcomes, in October 2019, ProPublica reported on an incident of actual foul play in Detroit, Michigan in the designation process in which a high profile investor and a high-ranking state economic development official coordinated to designate a census tract (which did not originally meet the poverty level requirements for the program) where the investor had invested approximately $3 billion (Khaleel, 2019). In a similar incident, another high-profile investor lobbied for an amendment to Opportunity Zone designations to allow for the tract neighboring his investment site to be designated (Lipton, 2019).

While the rules pertaining to census tract eligibility were set by the Trump administration, state officials were granted considerable discretion in the recommendation and designation processes. The way the program is structured guarantees that only a quarter of eligible tracts are designated and very little is publicly known about the preliminary selection process. In pursuit of transparency, a period of public comment followed the preliminary release of each Governor’s recommendations.

Lawmakers hoped the step would allow local leaders and constituents to voice support, or opposition to any erroneous designations.

Although the program is expected to be advantageous for investors, there is evidence that the program is yet to attract the initially anticipated level of investment. In an October 2019 publication, Novogradac, a San Francisco based accounting firm that advises Opportunity Fund managers, revealed that of the 112 funds that are reporting investments, only 15% of expected equity has been raised (Novogradac, 2019).

Figure 12: Opportunity Funds Listing, Available at https://www.novoco.com/resource-centers/opportunity-zone-resource-center/opportunity-funds-listing

The report also revealed that 87% of all equity raised will either be exclusively or in part be invested in residential development (Novogradac, 2019). Industry leaders claim the shortfall can be attributed to three dynamics: unbalanced risk-return metrics, excessively long holding periods, and delayed clarifications by the Treasury Department and IRS (Larsen, 2019).

Critics of the program insist that Opportunity Zone designations will accelerate gentrification in neighborhoods that would have otherwise attracted capital and stimulate gentrification in areas that have long attracted low-income communities. The intention of the policy is to spur investment in distressed communities and there is no language in the legislation that guarantees that the benefits of the investment are to be incurred by the tracts' current residents. In fact, there is evidence that suggests investments made have started to accelerate displacement of original residents (Kimbo & Phillips, 2018). Among Opportunity Zones with sufficient data, roughly half have outpaced the national rate of value gain, 8.3%, between Q3-2018 and Q3-2019 (ATTOM, 2019). This is good news for would-be investors as well as Opportunity Zone residents who own their homes.

Opportunity Zone Case Highlights

During the Opportunity Zone selection process, city and state officials across the country aimed to align Opportunity Zone census tracts with existing general plan objectives and statewide strategies. For instance, the state of California intentionally aligned the Opportunity Zone census tract designations with existing environmental quality tracts: 96% of tracts overlap with AB 1550 tracts are mandated to receive a minimum of 25% of all funds raised through CA's cap and trade program (CA Opportunity Zones, 2019). In general, in defining their designations, states hoped that Opportunity Zone designations would expedite economic development initiatives and aid preexisting efforts to draw capital into underserved communities. This section highlights the experiences of a few cities across the US as they pertain to zone designations.

The city of Fresno, California's fifth largest, had struggled to attract investment for years. In 2015, a few years before the Opportunity Zone program was announced, the city adopted a new zoning code that would facilitate the development of new shopping areas, allowing flexible building use, direct commercial development into transit rich areas and guide single family housing development to areas with appropriate infrastructure (City of Fresno Planning and Development, 2016). When the governor approached the city for recommendations, officials nominated tracts in strategic economic development and transit-oriented development corridors, mostly in the southern part of the city (Greene et al., 2019). City officials are hopeful that the dual efficacy of land use amendments and Opportunity Zone designations will transform areas targeted for growth. The city is also cognizant of the potentially harmful outcomes that may come about following designations. Although the majority of the targeted tracts are commercial areas with little to no residential use, as a precaution, the city has created an anti-displacement task force to monitor changes and mitigate negative consequences brought on by development (Greene et al., 2019).

Officials in Cleveland, Ohio facilitated a similar approach by nominating tracts that were already part of the mayor's Neighborhood Transformation Initiative. Through form-based zoning overlays, the plan aims to increase density and stimulate mixed-use development. The areas targeted by the initiative border emerging neighborhoods that have seen moderate investment. Officials hope that the Opportunity Zone programs will direct private investment into slower growing neighborhoods that have historically experienced disinvestment (Greene et al., 2019).

There was no explicit announcement about the selection criteria for the City of LA. However, evidenced by a high degree of overlap with existing place-based policies, we can assume that LA city officials also pursued similar approaches as Cleveland and Fresno. Using GIS tools, I found that 170 of the 193 Opportunity Zone tracts in the city are either entirely within or partially overlap a TOC buffer zone. Seventy-four percent of Opportunity Zone parcels in LA can participate in the TOC program. This evidence suggest that the city intentionally directed Opportunity Zone designations into communities that the city would like to improve and arguably densify. The map below (Figure 12) illustrates the overwhelming degree of overlap between the two programs.

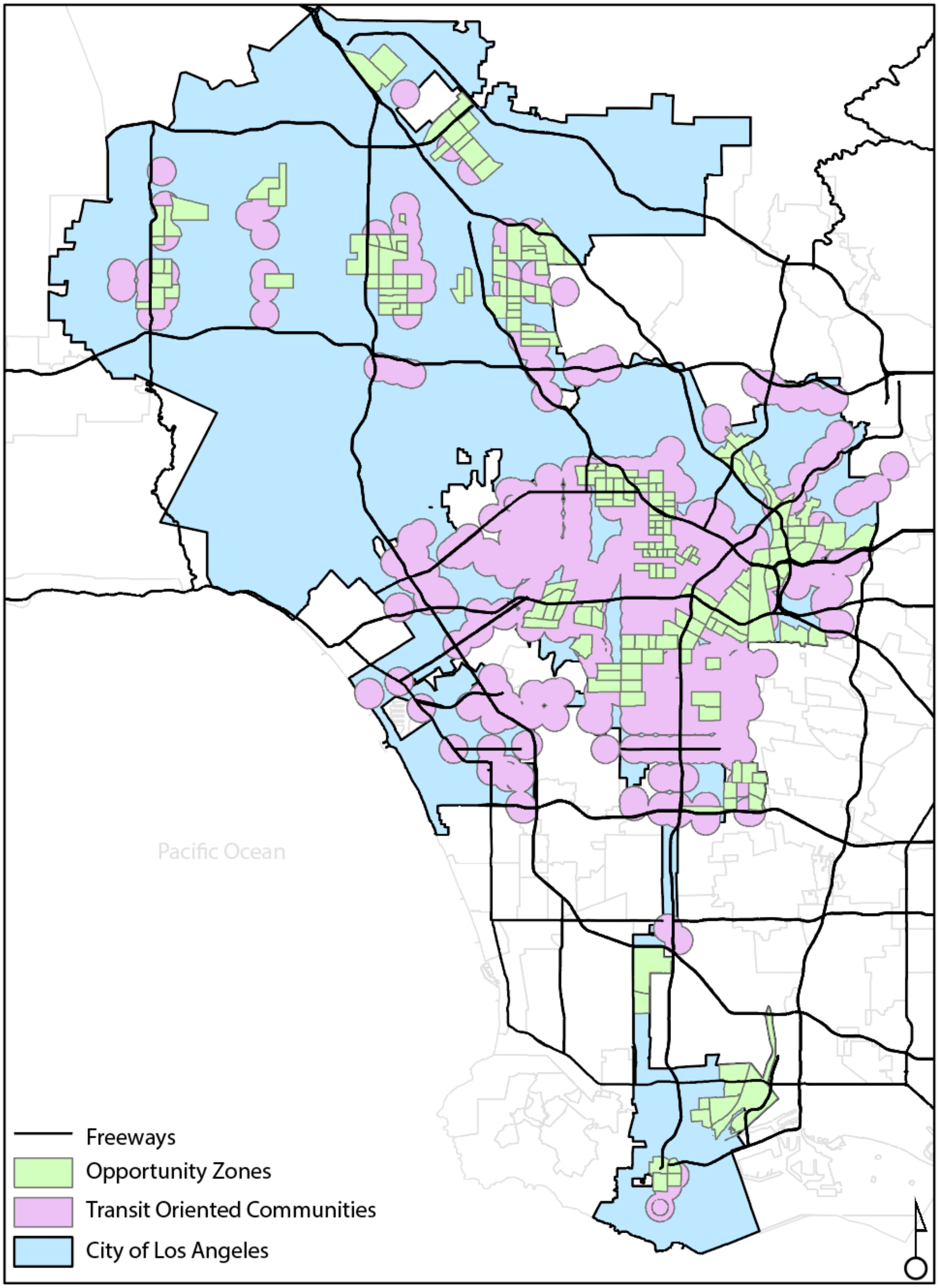

Figure 13: TOC & Opportunity Zones, City of LA

Research Design and Data

I implemented a mixed- methods approach to best understand if the two place-based policies, the TOC guidelines and Opportunity Zone program, have the land-use potential to meet the city's demand for housing. My research employs spatial analysis, a review of socio-economic statistics and a policy analysis.

Datasets Used

- *LA County Tax Assessor's Parcel Level Data shapefile*
- *City of Los Angeles Parcel Level Data shapefile*
- *Opportunity Zones in California shapefile*
- *Transit Oriented Communities buffers shapefile*
- *Hillside Ordinance shapefile*
- *Historical Preservation Overlay Zone shapefile*
- *Historic Cultural Monument shapefile*
- *Specific Plan Areas shapefile*
- *UCLA's Center of Neighborhood Knowledge, 2015 Series*

Selection of Policies

I chose to focus on the TOC policy because the recently passed measure is responsible for the majority of new developments within the city. The program has attracted much attention because it alleviates considerable entitlement risk from development projects in high-demand, high-priority communities. Increased density and reduced minimum parking requirements can counterbalance the cumulative impacts of hard and soft costs, land acquisitions costs and lost revenue attributable to affordability commitments, and thereby make more development projects pencil-out (Garcia, 2019).

Additionally, I chose to include Opportunity Zones in my study because, although the program has been mired by controversy, its impacts over the coming decade will be sizeable. The once in a generation policy has the potential to transform rural and urban communities across the country.

Selection of Scale

Any study concerning a regional matter such as the development of transit accessible affordable housing must first determine an appropriate scale. In previous sections, I alluded to my study area as Southern California, LA Metro, LA County and the city of LA. While I considered conducting a regional TOD/Opportunity Zone development capacity analysis, I quickly realized the limitations of approaching my study at that scale.

First, there is no single, uniform TOD land use policy that has been adopted on a regional scale. SCAG, the regional planning agency, has no direct authority in municipal land-use regulation. Historically, the agency has concentrated on regional transportation initiatives and has spearheaded efforts to combat the region's notoriously poor air quality. The agency takes an advisory role in land use discussions.

Second, the city of Los Angeles has several hundred major transit nodes, which are defined as a either a rail station or bus stop that services two or more bus routes that operate at frequent intervals during peak hours (Department of City Planning, 2018). Most cities contain too few major transit nodes to adopt a TOD policy framework. It is typical for cities with fewer major transit nodes to adopt TOD legislation through a specific plan, most often drafted through a partnership with LA Metro; the cities of Long Beach and Pasadena being the best examples.

Third, very few municipalities are as vast and populous as the city of Los Angeles. The city is the most influential municipality in the region and accounts for roughly 40% of the county's population and 11.5% of its land mass; it is the country's second largest city by population. According to SCAG's RHNA, the city of LA will be responsible for absorbing 34.5% of the region's new housing units. The city is economically, culturally and environmentally diverse and contains some of the country's most affluent and also its most impoverished communities.

Fourth, the distribution of Opportunity Zones across the region is highly concentrated in the city of Los Angeles. Of the 274 Opportunity Zone in the county, 193 are located within the city of LA. The LA County municipality with the second most Opportunity Zone census tracts is Long Beach with 19.

For these reasons, I chose to focus my studies solely on parcels that fall within both TOC buffers and Opportunity Zones in the city of Los Angeles.

Investigation

This study attempts to 1) calculate the number of homes that could theoretically be built using as of right zoning and TOC base incentives; 2) understand the socio-economic characteristics of the communities within the areas identified; and 3) recommend a set of policies that would rectify the affordability shortfalls and alleviate the land-use restrictions in the existing planning framework.

Step One attempts to estimate both the total number of residences and the number of affordable homes that could theoretically be built under current land use and density bonus policies. This type of study is called a ‘Zoned Development Capacity’ assessment or a ‘Land Capacity Analysis’. In 2013, as part of a General Plan Housing Element update, the city published a report titled an ‘Inventory of Sites for Housing’ that quantified land-use development potential on parcels they found to be likely redevelopment sites. The methods and assumptions described in the following section mirror the city’s approach.

This study deviates slightly from LA’s methodology in two key ways. The two study components were adopted from a similar assessment conducted by the city of Seattle and are described at length in the following section.

In **Step Two**, using UCLA’s Center of Neighborhood Knowledge database, I conduct a high-level socio-economic assessment and determine each census tract’s vulnerability to gentrification and displacement.

The trends uncovered in steps one and two inform **Step Three** which outlines a set of policies that have shown to alleviate certain socio-economic stresses, land-use restrictions and other impediments to the development of affordable housing.

Methodology

Step One: Zoned Development Analysis within Study Area

In Step One, I first identified qualifying sites and then calculated the net housing capacity of each parcel.

Qualifying Sites

For this study, I employed the City of LA's 'Inventory of Sites for Development' methodology and adhered to the following selection criteria (DCP, 2013):

1. Only parcels that allow as of right residential development were considered. All parcels that are zoned exclusively for industrial use were eliminated from this study.
2. Commercial "Conversion Factor'
    a. Although nearly half of all new multi-family permits have been filed for residential development in commercial zones, the city recognizes that not all commercial parcels will be redeveloped. The city assumes different 'conversion factors' for commercial land in three land use categories which reflects the likelihood of each parcel being redeveloped.
        i. Ten percent of parcels in 'Community Commercial' areas with height restrictions (1.5:1 FAR) were included in the study.
        ii. Fifty percent of parcels in 'Community Commercial' areas with FAR's over 3:1 were included in the study.
        iii. Sixty percent of parcels in 'Regional Centers' were included in the study.

3. Parcels smaller than 1,000SF in area, which are thought to be unsuitable for development, were excluded from the study.
4. The study also excluded parcels that have structures younger than twenty years old as they are unlikely to be redeveloped in the immediate future.
5. All parcels that fall within a Historical Preservation Overlay Zone, a Historic Cultural Monument, or subject to the Mills Historical Property Act were not considered eligible sites for redevelopment.
6. All parcels that fell within a Specific Plan area were calculated individually. In total, 26,495 parcels across twenty five Specific Planning Areas were investigated. Parcels that fell within Specific Plan Areas that do not limit or only moderately limit development were included.
    a. All specific plan areas were evaluated. Most restrict parking, regulate design, landscaping, height and use, characteristics this analysis is not considering. Density bonuses and limitations outlined in each specific plan were accounted for.
7. Parcels with a land use designation of “Regional Center Commercial” and “Regional Commercial” were isolated and calculated separately. Commercial parcels with these land use designations are afforded greater residential density.
8. All 106 (Q) and (D) conditional zones were evaluated.
    a. Development capacity for residential parcels with a Q-conditions (qualified) zoning designation was calculated using the zone’s corresponding FAR.
    b. Parcels with D-conditions were omitted as they limit increased density or redevelopment.

9. Hillside parcels subject to the Slope Density Ordinance or are designated for minimum density residential use were removed from consideration.

Net Potential Housing Calculation

1. Capacity for parcels in residential zones was calculating using the city's residential density (lot area per unit) regulation.
2. Capacity for parcels within commercial zones was calculated by multiplying the square footage by the corresponding FAR. To calculate the total number of housing units, the total building square footage was then divided by 1,406, the square footage of the median multi-family residence permitted in the city between August 2007 and May 2012 (DCP, 2013).
3. All existing units were then subtracted to get the net capacity of each developable parcel.
4. Net units were then divided by the number of existing units. Only sites with a net potential three times the existing number of units were considered developable sites.
    a. By only counting parcels with a net potential three times the existing number of units, the study only captures parcels that have considerable zoning potential and are likely to be redeveloped. This consideration in the city's methodology may over count commercial properties which have no existing residential units.
5. Only parcels with a net capacity greater than five new units were considered.
6. Assumptions adopted from Seattle's methodology (OPCD, 2014):
    a. Sites with condominiums on them were not considered in the study because they are very unlikely to be redeveloped.

    i. The consent of all condo owners would be needed to redevelop a site. I felt this was an appropriate factor to consider and was surprised to see LA's methodology does not account for this.

b. All parcels with churches, hospitals, cemeteries, parks, schools and universities were omitted from the study because they too are unlikely to be redeveloped.

    i. I believe this was an appropriate deviation from LA's methodology because while zoning may allow residential development, it is very unlikely that residences will ever be built on these parcels.

The following factors were not considered in this study:

- Height restrictions
- Property costs
- Parking requirements
- Front, Rear & Side yard requirements
- Lot coverage constraints
- Availability of utilities
- Accessory Dwelling Units
- Development projections unconstrained by time
- Availability of capital
- No land agglomeration or subdivision
- Additional discretionary incentives that are part of the TOC programs 'Menu of Incentives' (Appendix II)
- Statutory site exemptions
- Condominium sites
- Sites with adaptive reuse potential

These factors can have a significant impact on the probability of a parcel being redeveloped and are therefore limitations of my study. Further research which takes these factors into account must be done.

Step Two: Socio-Economic Analysis

Using UCLA's Center of Neighborhood Knowledge database, I will determine the demographic and socio-economic make-up of my communities of interest. The Center's comprehensive methodology weighs relevant social, economic, political and environmental indicators in all of Los Angeles County and determines whether or not each census tract has either gentrified, is at risk of gentrification or at no risk at all.

The Center's assessment was done on a census tract scale. This analysis was straightforward for LA's 193 Opportunity Zone census tracts, but was challenging for the additional 512 undesignated tracts that intersect a TOC eligible parcel. For step two, I chose to include undesignated census tracts only if their parcel coverage ratio was within one standard deviation of an Opportunity Zone tracts' coverage ratio. The average percentage of parcel coverage for Opportunity Zone tracts was 38% with a standard deviation of 18%. Therefore, in an effort to understand the socio-economic make-up of the communities that are likely to experience development, I included 350 undesignated census that had a percentage parcel cover greater than 20%. In total, step two captures the socio-economic status of 543 of the city's 1010 census tracts.

Step Three: Policy Proposal

Construct an index of potential policies that could further encourage the expeditious development of transit accessible affordable housing and protect vulnerable people that currently reside in gentrification-prone neighborhoods.

Results

Step One: Zoned Development Capacity

Following the city's selection methodology, I identified 15,077 parcels within the study area that have significant development potential. Surprisingly, only parcels within TOC density bonus areas met the city's selection methodology. In all, the identified parcels can yield 266,852 units of housing. The Department of City Planning reports that through September 2019 26% of all housing units in TOC buffer areas were income restricted homes (DCP, 2019). If this trend is to continue, up to 69,381 units of affordable housing can be built within the study area.

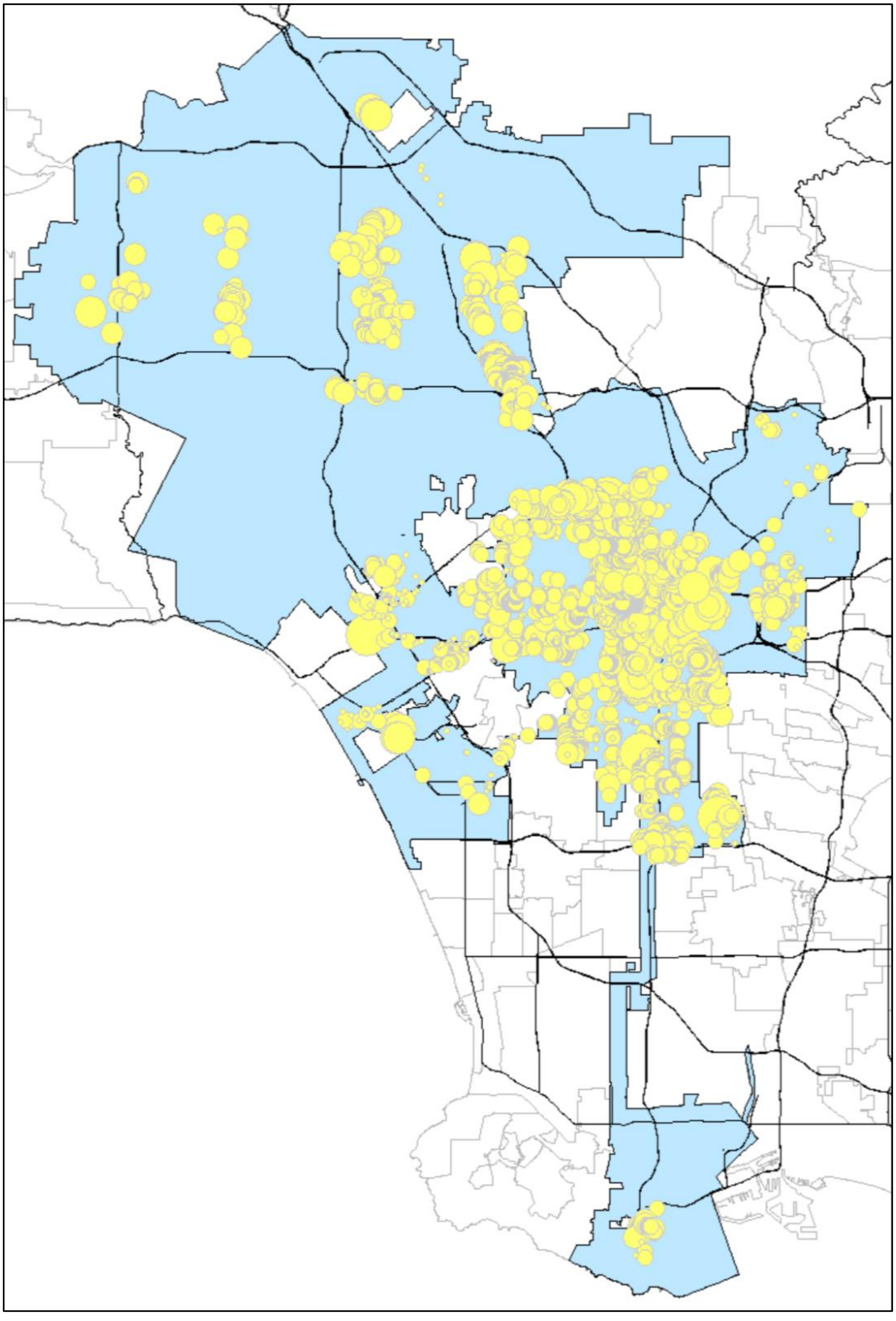

Figure 14: Location of 'Developable Sites'

Step Two: Socioeconomic Analysis

Using UCLA's Center for Neighborhood Knowledge dataset, I calculated relevant socio-economic statistics for five relevant scales and study areas.

	LA City O-Zones	Undesignated Tracts	TOC + OZ Tracts	LA City	LA County
Population Density (/sq. mi.)	19,684	23,113	21,892	17,069	13,402
Population, '15	774,910	1,355,070	2,129,980	3,935,767	10,038,388
% White	13.7%	24.4%	20.6%	29.1%	27.6%
% Black	10.2%	12.3%	11.6%	8.8%	8.2%
% Asian	9.9%	11.7%	11.1%	11.8%	14.0%
% Hispanic	64.5%	49.3%	54.8%	47.9%	47.7%
Adults, less than HS	37.4%	28.2%	31.5%	25.9%	24.2%
Adults, college degree	17.4%	29.4%	25.1%	30.8%	28.9%
Number of jobs	399,489	470,873	870,362	1,792,519	4,443,144
Indv. poverty rates, '15	31.5%	25.3%	27.5%	22.2%	18.7%
Med. household income, '15	$34,175	$47,690	$42,799	$55,915	61,212
% Renter, '15	78.4%	71.4%	73.9%	62.5%	53.4%
% Rent burden, '15	63.6%	60.3%	61.5%	58.4%	56.0%
Median gross rent, '15	$1,060	$1,265	$1,192	$1,347	$1,383
% Section 8 households	4.8%	4.4%	4.6%	3.3%	2.7%
Change in median gross rent	+$259	+$289	+$278	+$295	+$285
Change in whites, '00- '15	+1.2%	-.61%	0.0%	-1.6%	-4.5%
Change in college-educated population, '00- '15	+6.3%	+6.9%	+6.7%	+6.9%	+5.8%
Change in median household income, '00- '15	-$3,018	-$121	-$1,153	-$2,674	-$4,264
Change in rent burden, '00- '15	+16.7%	+13.4%	+14.6%	+13.3%	+12.9%
Change in Section 8, '00- '15	+1.5%	+.88%	+1.1%	+0.7%	+0.6%
Disadvantaged, '00- '15	162, 82%	210, 60%	372, 69%	497, 49%	924, 39%
Gentrified, '00- '15	17	31	48	71	88
Total	193	350	543	1010	2340

As was expected, Opportunity Zone designated tracts are some of the most underserved tracts in the County — 84% are considered disadvantaged by UCLA's methodology. Among all scales, they have the greatest percentage of individual poverty rates, the highest percentage of renters and the greatest percentage of rent burden. Households in Opportunity Zones also saw the greatest net decrease in median household income from the year 2000-2015; only the county average is greater. Opportunity Zone tracts also saw the greatest increase in rent burden percentage 2000-2015. The trends illustrated above are consistent with the Opportunity Zone guidelines.

Unsurprisingly, undesignated tracts, tracts that have at least 20% parcel coverage, had socio-economic conditions more similar to Opportunity Zone tracts than City averages. The majority of these tracts neighbor Opportunity Zones and therefore share socio-economic characteristics. The greatest disparity among designated and undesignated tracts is change in median household income. It appears that residents of undesignated tracts have on balance maintained their income. Further research is needed to uncover the source of this data point.

Step Three: Policy Proposal

In this section, I will recommend a set of policies that will bridge the shortcomings and address the vulnerabilities uncovered in steps one and two.

1) Adopt SB50
   a) The passage of SB50 would have a far-reaching impact on the City, the region and the state at large. In an analysis by LADCP, planners estimate that, when accounting for parcel level limitations, 43% of all developable land in the City would be eligible (DCP, 2019). Should the bill pass, development is expected to be most intense in the 6% of single-family zones parcels that are within .5 miles

of a rail station; 8% of higher density R2 zoned parcels would also see the most change (DCP, 2019).

b) The Mandatory Inclusionary Housing component of the senate bill will yield income restricted affordable housing in job and transit rich areas.

c) LA's mayor should publicly support the stalled initiative. The bill is ripe for endorsements from local leaders. Furthermore, the bill would require anti-development municipalities to zone for housing development and will alleviate the disproportionate effort the city has committed to increasing the affordable housing supply.

2) Build on the Success of the TOC Program

   a) The success of the TOC program which both addresses affordability and promotes sustainability must not be overlooked. The City should consider increasing the baseline incentives and affordability commitments.

3) Reduce streamlining approval threshold

   a) SB 35 is an adopted bill that streamlines California Environmental Quality Act procedures and permitting for projects with a minimum 50% affordability commitment (Wiener, 2017). Whereas the majority of projects proposed through the TOC program are committing 26% of units to be affordable, the City should consider reducing the approval threshold to include projects that are out-committing the program average.

4) Amend Industrial Zoning to accommodate residential

   a) The City should consider amending the municipal code to allow residential development in industrial zones. Such a change was alluded to in the City's 'Inventory of Sites for Housing' study (DCP, 2013).

5) Pursue local upzoning initiatives.

   a) The City is in the midst of reviewing every single one of their 35 community plans. In July 2019 Downtown LA's updated community plan was unveiled; the City eliminated parking requirements and anticipates the new plan can accommodate 125,000 new residents, 70,000 additional housing units and 55,000 new jobs (LADCP, July 2019). The city should continue upzoning job and transit rich community plans.

Conclusion

Los Angeles is in the midst of a major affordable housing shortage, which has perpetuated and contributed to homelessness, outmigration and severe rent burden. As such, this assessment on the city's capacity to accommodate the current housing need within its current zoning landscape is relevant and timely. Also important is the discussion on TOC and Opportunity Zones as two place-based policies that can contribute to meeting the housing need for the city of LA.

This research revealed many important insights about the intersection of land-use, zoning, affordable housing development and economic development initiatives in Los Angeles.

Major Takeaways

- Land-use is a significant constricting factor
- Los Angeles should further align its local economic development initiatives with regional, state and federal policies
- Opportunity Zone tracts are most vulnerable to gentrification
- All 15,077 parcels that have been identified as potential development sites are within TOCs, demonstrating the breadth of the program

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Appendix I

Los Angeles County Strategies to Combat Homelessness

E. CREATE A COORDINATED SYSTEM

- **E1** Advocate with Relevant Federal and State Agencies to Streamline Applicable Administrative Processes for SSI and Veterans Benefits
- **E2** Drug Medi-Cal Organized Delivery System for Substance Use Disorder Treatment Services
- **E3** Creating Partnerships for Effective Access and Utilization of ACA Services by Persons Experiencing Homelessness
- **E4** First Responders Training
- **E5** Decriminalization Policy
- **E6** Countywide Outreach System
- **E7** Strengthen the Coordinated Entry System
- **E8** Enhance the Emergency Shelter System
- **E9** Discharge Data Tracking System
- **E10** Regional Coordination of Los Angeles County Housing Authorities
- **E11** County Specialist Support Team
- **E12** Enhanced Data Sharing and Tracking
- **E13** Coordination of Funding for Supportive Housing
- **E14** Enhanced Services for Transition Age Youth
- **E15** Homeless Voter Registration and Access to Vital Records
- **E16** Affordable Care Act Opportunities
- **E17** Regional Homelessness Advisory Council and Implementation Coordination

B. SUBSIDIZE HOUSING

- **B1** Provide Subsidized Housing to Homeless Disabled Individuals Pursuing SSI
- **B2** Expand Interim Assistance Reimbursement to additional County Departments and LAHSA
- **B3** Partner with Cities to Expand Rapid Re-Housing
- **B4** Facilitate Utilization of Federal Housing Subsidies
- **B5** Expand General Relief Housing Subsidies
- **B6** Family Reunification Housing Subsidy
- **B7** Interim/Bridge Housing for those Exiting Institutions
- **B8** Housing Choice Vouchers for Permanent Supportive Housing

A. PREVENT HOMELESSNESS

- **A1** Homeless Prevention Program for Families
- **A2** Discharge Planning Guidelines
- **A3** Housing Authority Family Reunification Program
- **A4** Discharges From Foster Care and Juvenile Probation

D. PROVIDE CASE MANAGEMENT AND SERVICES

- **D1** Model Employment Retention Support Program
- **D2** Expand Jail In Reach
- **D3** Supportive Services Standards for Subsidized Housing
- **D4** Regional Integrated Re-entry Networks - Homeless Focus
- **D5** Support for Homeless Case Managers
- **D6** Criminal Record Clearing Project

C. INCREASE INCOME

- **C1** Enhance the CalWORKs Subsidized Employment Program for Homeless Families
- **C2** Increase Employment for Homeless Adults by Supporting Social Enterprise
- **C3** Expand Targeted Recruitment and Hiring Process to Homeless/Recently Homeless People to Increase Access to County Jobs
- **C4** Establish a Countywide SSI Advocacy Program for People Experiencing Homeless or At Risk of Homelessness
- **C5** Establish a Countywide Veterans Benefits Advocacy Program for Veterans Experiencing Homelessness or At Risk of Homelessness
- **C6** Targeted SSI Advocacy for Inmates

F. INCREASE AFFORDABLE/HOMELESS HOUSING

- **F1** Promote Regional SB 2 Compliance and Implementation
- **F2** Linkage Fee Nexus Study
- **F3** Support Inclusionary Zoning for Affordable Housing Rental Units
- **F4** Development of Second Dwelling Units Pilot Program
- **F5** Incentive Zoning/Value Capture Strategies
- **F6** Using Public Land for Homeless Housing

priorities.lacounty.gov/homeless

Figure 8 https://homeless.lacounty.gov/impact-dashboard/

Appendix II:

TOC Menu of Incentives

	Tier 1 (Low)	**Tier 2 (Med)**	**Tier 3 (High)**	**Tier 4 (Regional)**
Affordable Housing Requirement	8% ELI 11% VL 20% Low	9% ELI 12% VL 21% Low	10% ELI 14% VL 23% Low	11% ELI 15% VL 25% Low
Height	11 ft. for one story	11 ft. for one story	22 ft. for two stories	33 ft. for three stories
Transitional Height	Low	Low	Med	High
Exception	See below	See below	See below	See below
Yard/Setback R Zones	25% reduction (one yard)	30% reduction (one yard)	30% reduction (two yards)	35% reduction (two yards)
C Zones	Same as RAS3	Same as RAS3	Same as RAS3	Same as RAS3
Exception	Front yards in R zones may only be reduced in certain cases	Front yards in R zones may only be reduced in certain cases	Front yards in R zones may only be reduced in certain cases	Front yards in R zones may only be reduced in certain cases
Open Space	20% reduction	20% reduction	25% reduction	25% reduction
Lot Coverage	25% increase	25% increase	35% increase	35% increase
Lot Width	25% reduction	25% reduction	25% reduction	25% reduction
Averaging	Y	Y	Y	Y
Density Calculation	Y	Y	Y	Y
PF Zone	Y	Y	Y	Y

https://planning.lacity.org/odocument/87b0f2c2-8422-4767-a104-b7cd323ee26f/Transit-Oriented_Communities_-_Affordable_Housing_Incentive_Program_(FAQ).pdf

Appendix III:
SCAG's Comprehensive Guide to Local Affordable housing Policies

Available at

http://www.scag.ca.gov/Documents/ComprehensiveGuideToLocalAffordableHousingPolicy.pdf

Production policies

1) Fiscal strategies
   a) Impact fees for affordable housing
   b) Jobs-housing balance and commercial impact fees
   c) Community benefits agreements
   d) Housing trust funds
2) Taxing power strategies
   a) Tax exemptions for non-profit housing
   b) Levying parcel taxes; Tax increment financing districts
   c) Enhanced infrastructure financing districts
   d) Community revitalization and investment authority
   e) Bonds
3) Land use controls
   a) Expediting affordable, reduce parking requirements
   b) Inclusionary zoning
   c) Density bonus in exchange for affordable housing
   d) ADU
4) Asset investment
   a) Public land dedication
   b) Land banking

Preservation Strategies

1) Rent stabilization
2) Condominium conversion ordinances
3) No-net-loss/ one-for-one replacement strategies
4) Single room occupancy hotels rent
5) Mobile home rent controls

Tenant protections and support

1) Rental assistance
2) Tenant counseling
3) Proactive code enforcement
4) Just cause eviction policy
5) Tenant right to purchase laws

Asset building

1) Minimum wage
2) Wage theft protections
3) Local or first-source hiring
4) Individual development accounts
5) Homeowner assistance programs
6) Housing rehabilitation funds

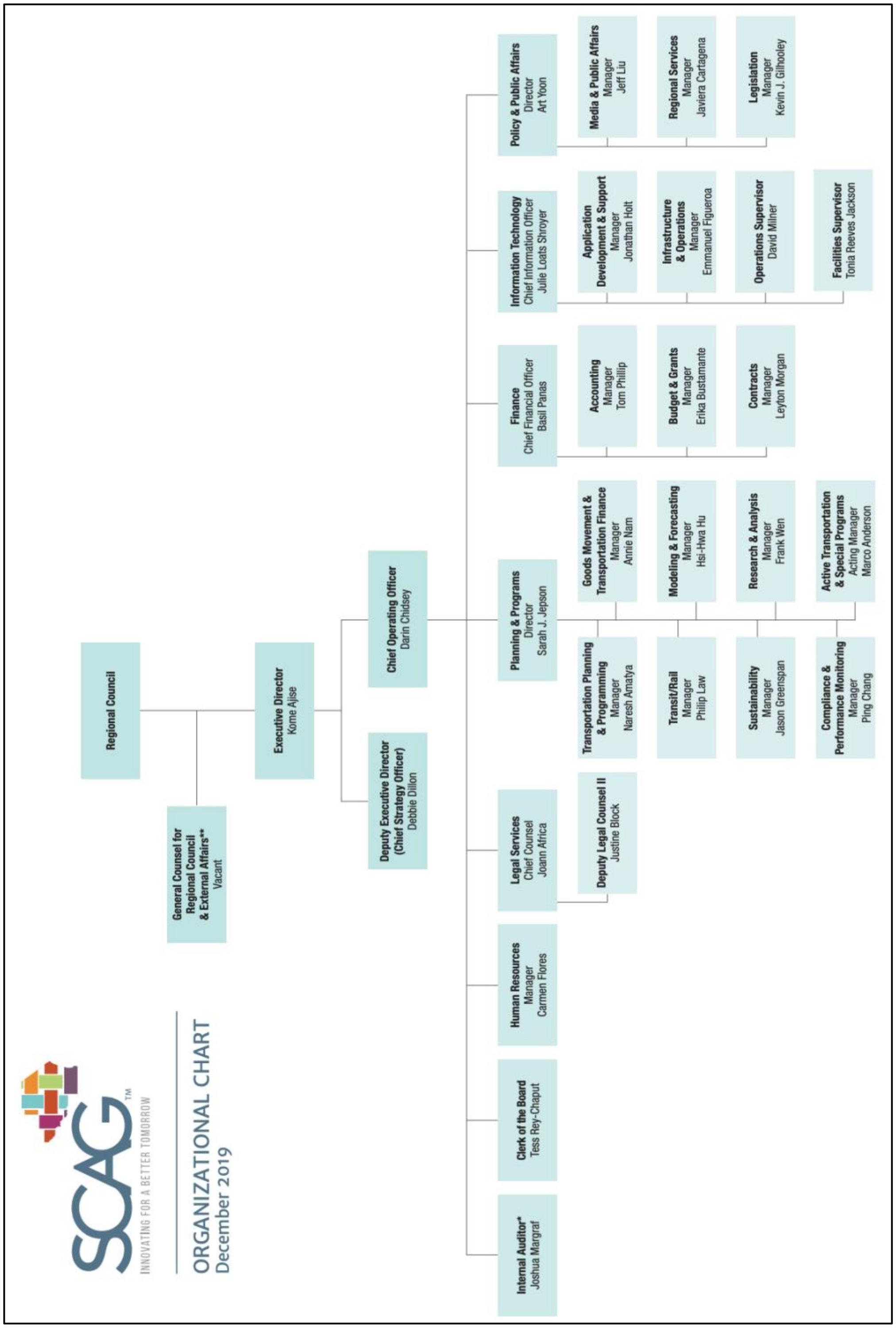
Affordable Housing funding sources

1) Affordable housing and sustainable communities program
2) LIHTC
3) PPP
4) EB5- Foreign investment

Cost Effective Gov. Regulations

1) CEQA Streamlining
2) Permit approval

Appendix IV:
SCAG Organizational Chart



http://www.scag.ca.gov/about/Documents/SCAGOrgChart.pdf